## (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 14 October 2004 (14.10.2004)

PCT

# (10) International Publication Number WO 2004/087652 A3

(51) International Patent Classification<sup>7</sup>: C07D 487/04, A61K 31/53, A61P 35/00

(21) International Application Number:

PCT/US2004/009553

(22) International Filing Date: 29 March 2004 (29.03.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/459,293

1 April 2003 (01.04.2003) US

- (71) Applicant (for all designated States except US):
  SMITHKLINE BEECHAM CORPORATION
  [US/US]; One Franklin Plaza, Philadelphia, PA 19101
  (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): CHEUNG, Mui [CN/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). KING, Nigel, Paul [GB/GB]; GlaxoSmithKline, New Frontiers Science Park N & S, Third Avenue, Harlow Essex CM 19 5AW (GB). KUNTZ, Kevin, Wayne [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). MOOK, Robert, Anthony, Jr. [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). POBANZ, Mark, Andrew [US/US]; 3845 Earhart Drive, Westfield, IN 46074 (US). SALOVICH, James, Michael [US/US]; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US). WILSON, Brian, John [CA/US]; GlaxoSmithKline, Five

Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US).

- (74) Agents: LEVY, David, J et al.; GlaxoSmithKline, Five Moore Drive, P.O. Box 13398, Research Triangle Park, NC 27709 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

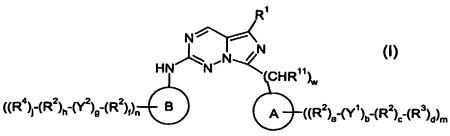
#### Published:

with international search report

(88) Date of publication of the international search report: 10 February 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IMIDAZOTRIAZINE COMPOUNDS



(57) Abstract: The present invention provides compounds of formula (I): Insert formula (I) here wherein all variables are as defined herein, pharmaceutical compositions containing the same, processes for preparing the same and their use as pharmaceutical agents.



### INTERNATIONAL SEARCH REPORT

International Application No PCT/US2004/009553

a. classification of subject matter IPC 7 C07D487/04 A61K31/53 A61P35/00 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 C07D Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, BEILSTEIN Data C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. P,A WO 2004/005291 A (BAYER HEALTHCARE AG ; 1-46 NIEWOEHNER MARIA HF (DE); TERSTEEGEN ADRIAN (DE)) 15 January 2004 (2004-01-15) the whole document Α DE 100 11 530 A (ELEZ ROBERT) 1 - 4627 September 2001 (2001-09-27) the whole document Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents : "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the International search report 9 November 2004 22/11/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo ni, Fax: (+31–70) 340–3016 Baston, E

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/US2004/009553

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 2004005291	Α	15-01-2004	DE WO	10230604 A1 2004005291 A1	29-01-2004 15-01-2004
DE 10011530	A	27-09-2001	DE	10011530 A1	27-09-2001